MP 4

U.S. Small Business Administration
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Business Development Publication
MP 4
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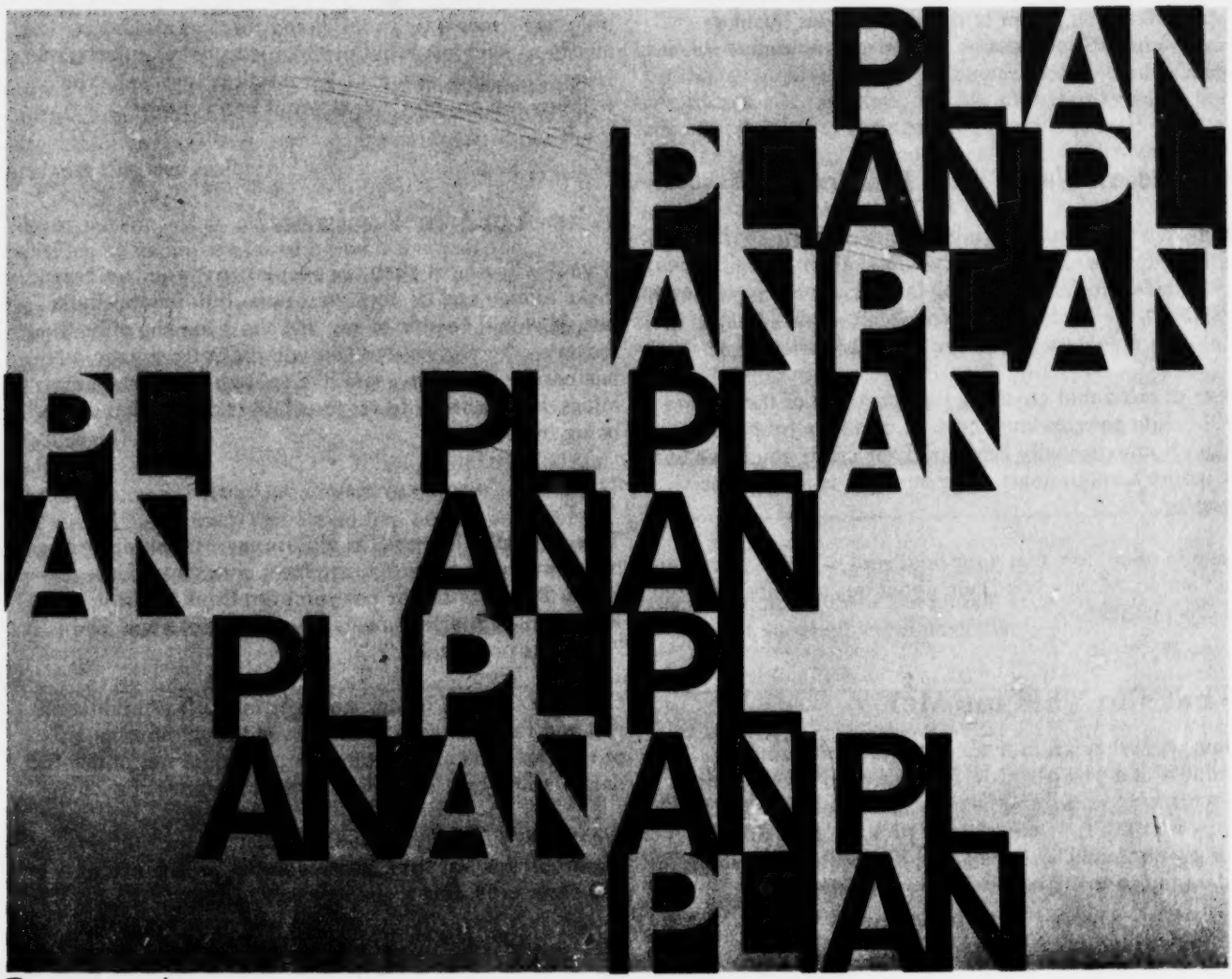
SBA

Business Plan for Small Manufacturers



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Summary

A business plan can provide the owner-manager or prospective owner-manger of a small manufacturing firm with a pathway to profit. This *publication* is designed to help an owner-manager in drawing up a business plan.

In building a pathway to profit you need to consider the following questions: What business am I in? What goods do I sell? Where is my market? Who will buy? Who is my competition? What is my sales strategy? What merchandising methods will I use? How much money is needed to operate my company? How will I get the work done? What management controls are needed? How can they be carried out? When should I revise my plan? Where can I go for help?

No one can answer such questions for you. As the owner-manager you have to answer them and draw up your business plan. The pages of this *publication* are a combination of text and workspaces so you can write in the information you gather in developing your business plan—a logical progression from a commonsense starting point to a commonsense ending point.

A Note on Using This Publication

It takes time and energy and patience to draw up a satisfactory business plan. Use this publication to get your ideas and the supporting facts down on paper. And, above all, make changes in your plan on these pages as that plan unfolds and you see the need for changes.

Bear in mind that anything you leave out of the picture will create an additional cost, or drain on your money, when it unexpectedly crops up later on. If you leave out or ignore enough items, your business is headed for disaster.

Keep in mind, too, that your final goal is to put your plan into action. More will be said about this step near the end of this publication.

What's in This for Me?

Time was when an individual could start a small business and prosper provided you were strong enough to work long hours and had the knack for selling for more than the raw materials or product cost. Small stores, grist mills, livery stables, and blacksmith shops sprang up in many crossroad communities as Americans applied their energy and native intelligence to settling the continent.

Today this native intelligence is still important. But by itself the common sense for which Americans are famous will not insure success in a small business. Technology, the marketplace, and even people themselves have become more complicated than they were 100, or even 25, years ago.

Common sense must be combined with new techniques in order to succeed in the space age. Just as one would not think of launching a manned space capsule without a flight plan, so one should not think of launching a new small manufacturing business without a business plan.

A business plan is an exciting new tool that you can use to plot a "course" for your company. Such a plan is a logical progression from a commonsense starting point to a commonsense ending point.

To build a business plan for your company, an owner-manager needs only to think and react as a manager to questions such as: What product is to be manufactured? How can it best be made? What will it cost me? Who will buy the product? What profit can I make?

Why Am I in Business?

If you're like most business people, you're in business to make money and be your own boss. But, few business people would be able to say that those are the only reasons. The money that you will make from your business will seldom seem like enough for all the long hours, hard work, and responsibility that go along with being the boss.

Then, why do so many stay in business?

This is hardly the time for philosophy. If you're starting or expanding a business, you have enough to think about. But, whether or not you even think about it, the way you operate your business will reflect your "business philosophy."

Consider this. An owner-manager inspects a production run and finds a minor defect. Even though in nine out of ten cases the user of the product would not notice the defect, the owner decides to scrap the entire run.

What does this tell you? It shows that he (or she) gets an important reward from doing what is the right thing—in this case, providing a quality product.

The purpose of this section is not to play down the importance of making a profit. Profits are important. They will keep your business going and attract additional capital into your business. But you should be aware that there are other rewards and responsibilities associated with having your own business.

In your planning, you might give some thought to your responsibilities to employees, community, stockholders, customers, product, and profit. Jot these down. Later, when you've lined-up your management team, discuss this subject with them. This type of group thinking will help everyone, including yourself, understand the basic purposes for each day's work.

Even though you won't advertise it throughout your market, the way you operate your business will reflect your business philosophy.

What Business Am I in?

In making your business plan, the next question to consider is: What business am I really in? At first reading, this question may seem silly. "If there is one thing I know," you say to yourself, "it is what business I'm in." But hold on. Some owner-managers go broke and others waste their savings because they are confused about the business they are really in.

The experience of an old line manufacturing company provides an example of dealing with the question: What business am I really in? In the early years of this century, the founder of the company had no trouble answering the question. As he put it, "I make and sell metal trash cans." This answer held true for his son until the mid-1950's when sales began to drop off. After much thought, the son decided he was in the container business.

Based on this answer, the company dropped several of its lines of metal trash cans. modified other lines, and introduced new products, such as shipping cartons used by other manufacturers and Government agencies.

What business am I in? (Write your answer here) _____

_____

Asking questions like: What does my product do for my customer? Why? When? Where? How? What doesn't it do? What should it do later but doesn't now? can lead to the ultimate conclusion of what business you're in and possibly direct you to new lines of products or enterprises.

Marketing

When you have decided what business you're really in, you have just made your first marketing decision. Now you must face other marketing considerations.

Successful marketing starts with you, the owner-manager. You have to know your product, your market, your customers, and your competition.

Before you plan production, you have to decide who your market is, where it is, why they will buy your product, whether it is a growth or static market, if there are any seasonal aspects of the market, and what percentage of the market you will shoot for in the first, second, and third year of operation. Your production goals and plans must be based on and be responsive to this kind of fact finding (market feasibility and research).

The narrative and work blocks that follow are designed to help you work out a marketing plan. Your objective is to determine what needs to be done to bring in sales dollars.

In some directories, marketing information is listed according to the Standard Industrial Classification (SIC) of the product and industry. The SIC classifies firms by the type of activity they're engaged in, and it is used to promote the uniformity and comparability of statisical data relating to market research. When you begin your market research, you may find it useful to have already classified your products according to this code. (The Standard Industrial Classification Manual is available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington , D.C. 20402. It may also be available at your local library.)

	Product	SIC No.
1.	_____	_____
2.	_____	_____

Market Area. Where and to whom are you going to sell your product? Describe the market area you will serve in terms of geography and customer profile:

_____

Who Are Your Competitors? List your principal competitors selling in your market area, estimate their percentage of market penetration and dollar sales in that market, and estimate their potential loss of sales as a result of your entry into the market.

Name of Competitor and Location	% Share of Market	Esti-mated Sales	Estimated Sales Loss Because of You
1. _____	_____	$ _____	_____
2. _____	_____	$ _____	_____
3. _____	_____	$ _____	_____

How Do You Rate Your Competition? Try to find out the strengths and weaknesses of each competitor. Then write your opinion of each of your principal competitors, their principal products, facilities, marketing characteristics, and new product development or adaptability to changing market conditions.

_____

Have any of your competitors recently closed operations or have they withdrawn from your market area? (State reasons if you know them):

_____

Advantages Over Competitors. On what basis will you be able to capture your projected share of the market? Below is a list of characteristics which may indicate the advantages your product(s) enjoy over those offered by competitors. Indicate those advantages by placing a check in the proper space. If there is more than one competitor, you may want to make more than one checklist. Atttach these to the worksheet.

Analyze each characteristic. For example, a higher price may not be a disadvantage if the product is of higher quality than your competitor's. You may want to make a more detailed analysis than is presented here. If you wish to spell out the specifics of each characteristic and explain where your product is disadvantaged and how this will be overcome, attach it to this worksheet. Also, the unique characteristics of your product can be the basis for advertising and sales promotion.

Remember, the more extensive your planning, the more your business plan will help you.

Product(s)	Product No.1	Product No.2
Price	( )	( )
Performance	( )	( )
Durability	( )	( )
Versatility	( )	( )
Speed or accuracy	( )	( )
Ease of operation or use	( )	( )
Ease of maintenance or repair	( )	( )
Ease or cost of installation	( )	( )
Size or weight	( )	( )
Styling or appearance	( )	( )
Other characteristics not listed:		
_____	( )	( )
_____	( )	( )

What, if anything, is unique about your product? _____

_____

_____

Distribution. How will you get your product to the ultimate consumer? Will you sell it directly through your own sales organization or indirectly through manufacturer's agents, brokers, wholesalers, and so on? Use the blank to write a brief statement of your method of distribution and manner of sales:

_____

What will this method of distribution cost you? _____

_____

Do you plan to use special marketing, sales, or merchandising techniques? Describe them here: _____

_____

List your customers by name, the total amount they buy from you, and the amount they spend for each of your products.

Names of Principle Customers	Total Purchasing Volume	By Products	% of Your Sales
_____	_____	_____	_____

Market Trends. What has been the sales trend in your market area for your principal product(s) over the last 5 years? What do you expect it to be 5 years from now? You should indicate the source of your data and the

basis of your projections.* Industry and product statistics are usually indicated in dollars. Units, such as numbers of customers, numbers of items sold, etc, may be used, but also relate your sales to dollars.

Product	Source of Data	Sales 5 Years Ago	Current Sales	Projected Sales in 5 Years
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____

*This is a marketing research problem. It will require you to do some digging in order to come up with a market projection. Trade associations will probably be your most helpful source of information. The Bureau of Census publishes a great deal of useful statistics.

List the name and address of trade associations which serve your industry and indicate whether or not you are a member.

_____

List the name and address of other organizations, governmental agencies, industry associations, etc., from which you intend to obtain management, technical, economic, or other types of information and assistance.

_____

Share of the Market. What percentage of total sales in your market area do you expect to obtain for your products after your facility is in full operation?

Products or Products Category	Local Market (%)	Total Market (%)
_____	_____	_____

Sales Volume. What sales volume do you expect to reach with your products?

	Total Sales	Product(s) 1	Product(s) 2
First Year	$_____	$_____	$_____
Units	_____	_____	_____
Second Year	$_____	$_____	$_____
Units	_____	_____	_____
Third Year	$_____	$_____	$_____
Units	_____	_____	_____

Production

Production is the work that goes on in a factory that results in a product. In making your business plan, you have to consider all the activities that are involved in turning raw materials into finished products. The work blocks which follow are designed to help you determine what production facilities and equipment you need.

Manufacturing Operations. List the basic operations, for example, cut and sew, machine and assemble, etc., which are needed in order to make your product.

_____

_____

Raw Materials. What raw materials or components will you need, and where will you get them?

Material/ Component	Source	Price	Comments (location, delivery, financing, etc.)
_____	_____	$ _____	_____
_____	_____	$ _____	_____

What amount of raw materials and/or components will you need to stock? _____

_____

Are there any special considerations concerning the storage requirements of your raw material? For example, will you use chemicals which can only be stored for a short time before they lose their potency?

_____

_____

Equipment. List the equipment needed to perform the manufacturing operations. Indicate whether you will rent or buy the equipment and the cost to you.

Equipment	Buy	Rent	Your Cost
_____	___	___	_____
_____	___	___	_____
_____	___	___	_____

Your equipment facilities, and method of operation must comply with the Occupational Safety and Health

Act of 1970. You may obtain a copy of *Standards for General Industry* from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or a field office of the Occupational Safety and Health Administration.

Labor Skills. List the labor skills needed to run the equipment:

Skill Classification	Number of Persons Needed	Pay Rate	Availability

List the indirect labor (for example, material handlers, stockmen, janitors, and so on) that is needed to keep the plant operating:

Skill Classification	Number of Persons Needed	Pay Rate	Availability

If persons with these skills are not already on your payroll, where will you get them?

_____

Space. How much space will you need to make the product? Include restrooms, storage for raw material and for finished products, and employee parking facilities if appropriate. Are there any local ordinances you must comply with?

_____

_____

Do you own this space? Yes _____ No _____

Will you buy this space? Yes _____ No _____

Will you lease this space? Yes _____ No _____

How much will it cost you? _____

Overhead. List the overhead items which will be needed in addition to indirect labor and include their cost. Examples are: tools, supplies, utilities, office help, telephone, payroll taxes, holidays, vacations, and salaries for your key people (sales manager, plant manager, and foreman).

_____

How Much Money is Needed?

Money is a tool you can use to make your plan work. Money is also a measuring device. You will measure your plan in terms of dollars; and outsiders, such as bankers and other lenders, will do the same.

When you determine how much money is needed to start (or expand) your business, you can decide whether or not to move ahead. If the cost is greater than the profits which the business can make, there are two things to consider. Many businesses do not show a profit until the second or third year of operation. If this looks like the case with your business, you will need the plans and financial reserves to carry you through this period. On the other hand, maybe you would be better off putting your money into stocks, bonds, or other reliable investments rather than taking on the time consuming job of managing a small business.

Like most businesses, your new business or expansion will require a loan. The burden of proof in borrowing money is upon the borrower. You have to show the banker or other lender how the borrowed money will be spent. Even more important, the lender needs to know how and when you will repay the loan.

To determine whether or not your plan is economically feasible, you need to pull together three sets of figures:

(1) Expected sales and expense figures for 12 months.
(2) Cash flow figures for 12 months.
(3) Current balance sheet figures.

Then visit your banker. Remember, your banker or lender is your friend, not your enemy. So, meet regularly. Share all the information and data you possess. If the lender is ready to help you, he (or she) needs to know not only your strengths but also your weaknesses.

Expected Sales and Expenses Figures. To determine whether or not your business can make its way in the market place, you should estimate your sales and expenses for 12 months. The form which follows is designed to help you in this task.

Cash Flow Figures. Estimates of future sales will not pay an owner-manager's bills. Cash must flow into the business at the proper times if bills are to be paid and a profit realized at the end of the year. To determine whether your projected sales and expenses figures are realistic, you should prepare a cash flow forecast for the 12 months covered by your estimates of sales and expenses.

The forms that follow were designed to help you estimate your cash situation and to get the appropriate figures on paper.

Projected Statement of Sales and Expenses for One Year

	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
A. Net Sales													
B. Cost of Goods Sold													
1. Raw Materials													
2. Direct Labor													
3. Manufacturing Overhead													
Indirect Labor													
Factory Heat, Light, and Power													
Insurance and Taxes													
Depreciation													
C. Gross Margin (Subtract B from A)													
D. Selling and Administrative Expenses													
4. Salaries and Commissions													
5. Advertising Expenses													
6. Miscellaneous Expenses													
E. Net Operating Profit (Subtract D from C)													
F. Interest Expense													
G. Net Profit before Taxes (Subtract F from E)													
H. Estimated Income Tax													
I. Net Profit after Income Tax (Subtract H from G)													

Estimated Cash Forecast

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
(1) Cash in Bank (Start of Month)												
(2) Petty Cash (Start of Month)												
(3) Total Cash (add (1) and (2))												
(4) Expected Accounts Receivable												
(5) Other Money Expected												
(6) Total Receipts (add (4) and (5))												
(7) Total Cash and Receipts (add (3) and (6))												
(8) All Disbursements (for month)												
(9) Cash Balance at End of Month in Bank Account and Petty Cash (subtract (8) from (7)*												

*This balance is your starting cash balance for the next month.

Current Balance Sheet Figures. A balance sheet shows the financial conditions of a business as of a certain date. It lists what a business has, what it owes, and the investment of the owner. A balance sheet enables you to see at a glance your assets and liabilities.

Use the blanks below to draw up a current balance sheet for your company.

Current Balance Sheet
For

_____
(name of your company)

as of

_____
(date)

Assets			**Liabilities**	
Current Assets			**Current Liabilites**	
Cash		$ _____	Accounts Payable	$ _____
Accounts Receivable		$ _____	Accrued Expenses	_____
Inventory		_____	Short Term Loans	_____
Fixed Assets			**Fixed Liabilities**	
Land		$ _____	Long Term Loan	$ _____
Building	$ _____		Mortgage	_____
Equipment	_____			
Total	_____		**Net Worth**	$ _____
Less				
Depreciation	_____	$ _____		
Total		_____	**Total**	$ _____

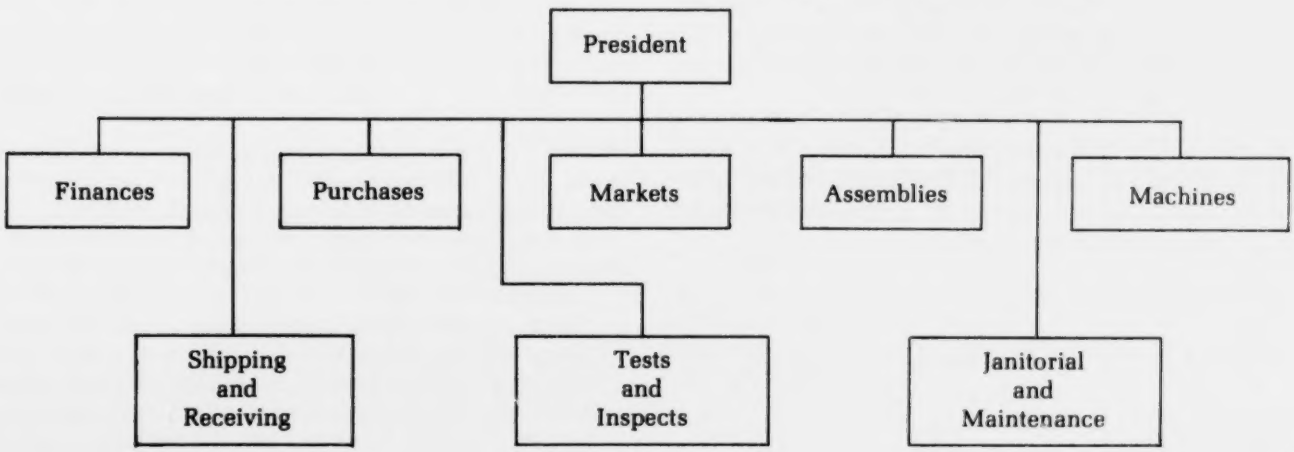
Getting the Work Done

Your manufacturing business is only part way home when you have planned your marketing and production. Organization is needed if your plant is to produce what you expect it to produce.

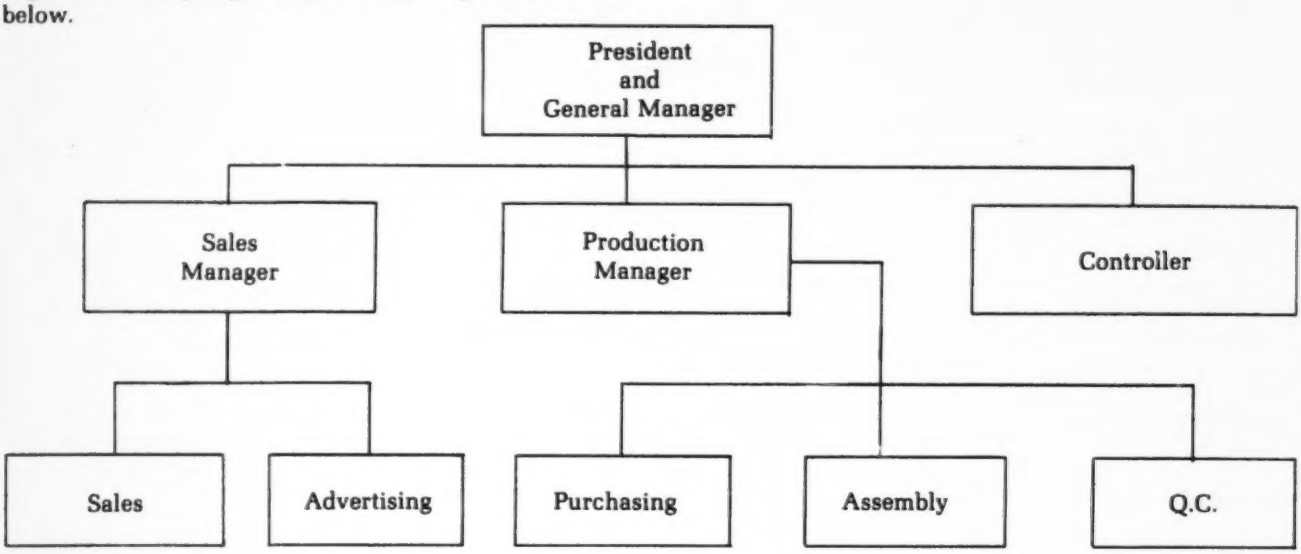
Organization is essential because you as the owner-manager probably cannot do all the work.

You'll have to delegate work, responsibility, and authority. A helpful tool in getting this done is the organization chart. It shows at a glance who is responsible for the major activities of a business. However, no matter how your operation is organized, keep control of the financial management. Examples are given here to help you in preparing an organization chart for your business.

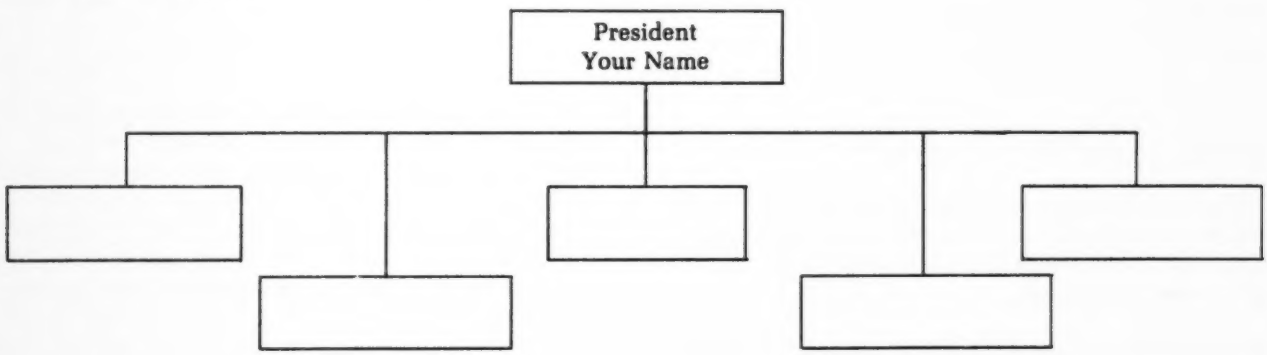
In the beginning, the president of the small manufacturing company probably does everything.



As the company grows to perhaps 50-100 employees, the organization may begin to look something like the chart below.



In the space that follows or on a separate piece of paper, draw an organization chart for your business.



It is important that you recognize your weaknesses early in the game and plan to get assistance wherever you need it. This may be done by using consultants on an as-needed basis, by hiring the needed personnel, or by retaining a lawyer and accountant.

The workblock below lists some of the areas you may want to consider. Adapt it to your needs and indicate who will take care of the various functions. (One name may appear more than once.)

Manufacturing _____

Marketing _____

Research and
Technical Backup _____

Accounting _____

Legal _____

Insurance _____

Other: _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Making Your Plan Work

To make your plan work you will need feedback. For example, the year end profit and loss (income) statement shows whether your business made a profit or loss for the past 12 months.

But you can't wait 12 months for the score. To keep your plan on target you need readings at frequent intervals. A profit and loss statement at the end of each month or at the end of each quarter is one type of frequent feedback. However, the P and L may be more of a *loss* than a profit statement if you rely only on it. In addition, your cash flow projection must be continuously updated and revised as necessary. You must set up management controls which will help you to insure that the right things are being done from day to day and from week to week.

The management control system which you set up should give you precise information on: inventory, production, quality, sales, collection of accounts receivable, and disbursements. The simpler the system, the better. Its purpose is to give you and your key people current information in time to correct deviations from approved policies. procedures, or practices. You are after facts with emphasis on trouble spots.

Inventory Control. The purpose of controlling inventory is to provide maximum service to your customers. Your aim should be to achieve a rapid turnover on your inventory, the fewer dollars you tie up in raw materials inventory and in finished goods inventory, the better. Or, saying it in reverse, the faster you get back your investment in raw materials and finished goods inventory, the faster you can reinvest your capital to meet additional consumer needs.

In setting up inventory controls, keep in mind that the cost of the inventory is not your only cost. There are inventory costs, such as the cost of purchasing, the cost of keeping inventory records, and the cost of receiving and storing raw materials.

Production. In preparing this business plan, you have estimated the cost figures for your manufacturing operation. Use these figures as the basis for standards against which you can measure your day-to-day operations to make sure that the clock does not nibble away at profits. These standards will help you to keep machine time, labor man-hours, process time, delay time, and down time within your projected cost figures. Periodic production reports will allow you to keep your finger on potential drains on your profits and should also provide feedback on your overhead expense.

Quality Control. Poorly made products cause a company to lose customers. In addition, when a product fails to perform satisfactorily, shipments are held up, inventory is increased, and a severe financial strain can result. Moreover, when quality is poor, it's a good bet that waste and spoilage on the production line are greater than they should be. The details—checkpoints, reports, and so on—of your quality control system will depend on your type of production system. In working out these details, keep in mind that their purpose is to answer one question: What needs to be done to see that the work is done right the first time? Will you have to do extensive quality control on raw materials? This is an added expense you must consider.

Sales. To keep on top of sales, you will need answers to questions, such as: How many sales were made? What was the dollar amount? What products were sold? At what price? What delivery dates were promised? What credit terms were given to customers?

It is also important that you set up an effective collection system for "accounts receivable," so that you don't tie up your capital in aging accounts.

Disbursements. Your management controls should also give you information about the dollars your company pays out. In checking on your bills, you do not want to be penny-wise and pound-foolish. You need to know that major items, such as paying bills on time to get the supplier's discount, are being handled according to your policies. Your review system should also give you the opportunity to make judgments on the use of funds. In this manner, you can be on top of emergencies as well as routine situations. Your system should also keep you aware that tax monies, such as payroll income tax deductions, are set aside and paid out at the proper time.

Break Even. Break-even analysis is a management control device because the break-even point shows about how much you must sell under given conditons in order to just cover your costs with NO profit and NO loss.

In preparing to start or expand a manufacturing business you should determine at what approximate level of sales a new product will pay for itself and begin to bring in a profit.

Profit depends on sales volume, selling price, and costs. So, to figure your break-even point, first separate your fixed costs, such as rent or depreciation allowance, from your variable costs per unit, such as direct labor and materials.

The formula is

$$\text{break-even volume} = \frac{\text{total fixed costs}}{\text{selling price—variable cost per unit}}$$

For example, Ajax Plastics has determined its fixed costs to be $100,000 and variable costs to be $50 per unit. If the selling price per unit is $100, then Ajax's break-even volume is

$$\text{break-even volume} = \frac{\$100{,}000}{\$100 - \$50} = 2000 \text{ units}$$

Earlier you estimated your expected sales for each product and total sales. Compute the break-even point for each.

Product 1:_____ Product 2:_____ Total Sales: _____

Keeping Your Plan Up to Date

The best made business plan gets out of date because conditions change. Sometimes the change is within your company, for example, several of your skilled operators quit their jobs. Sometimes the change is with customers. Their desires and tastes shift. For example, a new idea can sweep the country in six months and die overnight. Sometimes the change is technological as when new raw materials and components are put on the market.

In order to adjust a business plan to account for such changes, an owner-manager must:

(1) Be alert to the changes that come about in your company, in your industry, in your market, and in your community.

(2) Check your plan against these changes.

(3) Determine what revisions, if any, are needed in your plan.

You may be able to delegate parts of this work. For example, you might assign your shop foreman the task of watching for technical changes as reported in trade journals for your industry. Or you might expect your sales manager to keep you abreast of significant changes that occur in your markets.

But you cannot delegate the hardest part of this work. You cannot delegate the decisions as to what revision will be made in your plan. As owner-manager you have to make those judgments on an on-going basis.

When judgments are wrong, cut your losses as soon as possible and learn from the experience. The mental anguish caused by wrong judgments is part of the price you pay for being your own boss. You get your rewards from the satisfaction and profits that result from correct judgments.

Sometimes, serious problems can be anticipated and a course of action planned. For example, what if sales are 25 percent lower than you anticipated, or costs are 10 percent higher? You have prepared what you consider a reasonable budget. It might be a good idea to prepare a "problem budget," based on either lower sales, higher costs, or a combination of the two.

You will also have to exercise caution if your sales are higher than you anticipated. The growth in sales may only be temporary. Plan your expansion. New equipment and additional personnel could prove to be crippling if sales return to a previous lower level.

Keep in mind that few owner-managers are right 100 percent of the time. They can improve their batting average by operating with a business plan and by keeping that plan up to date.

We hope this publication has met your business needs. For a free copy of the Directory of Business Development Publications, write to: Publications, P.O. Box 1000, Fort Worth, Texas 76119 or contact your local SBA office.

SBA has a number of other programs and services available. They include training and educational programs, advisory services, financial programs, and contract assistance. Our offices are located throughout the country. For the one nearest you, consult the telephone directory under U.S. Government or call the Small Business Answer Desk at 1-800-368-5855. In Washington, D.C., call 653-7561.

This publication was printed at the UNICOR Print Plant, Federal Correctional Institution, Fort Worth, TX